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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,471	12/18/2000	Pascal Albert Emile Lefebvre	Q62150	9352

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EXAMINER
HAN, CLEMENCE S

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/737,471	<b>Applicant(s)</b> LEFEBVRE ET AL.	
	<b>Examiner</b> Clemence Han	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 14, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 6-9 and 21 are objected to because of the following informalities:

The term “adapted to” is optional language (for example, claim 6 line 1).

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1, 2, 4, 6-11, 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al. (US 5,367,523).

Regarding to claim 1, Chang teaches a network status reporting method for reporting in a communications network a network status information to a data source 21 with an adaptive transmission rate in order to enable said data source to adapt said transmission rate based on said network status information (Column 8 Line 15-24), said communications network further comprising at least one intermediate network node 22, and a data sink 23, wherein only said data sink reports to said data source on said network status information of said

communications network in a neighbourhood around the data sink (Column 8 Line 7-9), and wherein no intermediate network node reports to said data source on said network status information of said communications network (see Figure 2).

Regarding to claim 2, Chang teaches a communications network comprising: at least one data source 21 with an adaptive transmission rate; at least one intermediate node 22; and at least one data sink 23, wherein said data source adapts said transmission rate on the basis of network status information (Column 8 Line 15-24), and wherein only said data sink is able to report said network status information of said communications network in a neighbourhood of the data sink to said data source (Column 8 Line 7-9) and no intermediate node is able to report network status information to said data source (see Figure 2).

Regarding to claim 4, Chang teaches said data sink 23 is a network termination in an access network of said communications network.

Regarding to claim 6, Chang teaches the data source 21 adapted to be used in the communications network according to claim 2.

Regarding to claim 7, Chang teaches the data sink 23 adapted to be used in the communications network according to claim 2.

Regarding to claim 8, Chang teaches said data source is adapted to request said data sink to report to said data source on said network status information of said communications network (Column 8 Line 25-29).

Regarding to claim 9, Chang teaches said data sink is adapted to regularly report to said data source on said network status information of said communications network (Column 8 Line 60-63).

Regarding to claim 10, Chang teaches a communications system comprising: a data source 21 with an adaptive transmission rate; a line termination element 11; a network termination element 23 connected to the line termination element via a first network; and at least one intermediate node 22 connecting the data source to the line termination element via a second network; wherein the data source adapts the transmission rate on the basis of a network status reported by at least one of the line termination element and the network termination element (Column 8 Line 15-24), and wherein the network status is determined based on a quality of signal of the first network only (see Figure 2).

Regarding to claim 11, Chang teaches the first network is of a different type than the second network, and comprise a heterogeneous network system (Column 6 Line 16-20).

Regarding to claim 15, Chang teaches a network status reporting method comprising: a data sink 23 reporting to a data source 21 status information of a first communication network connected to the data sink; at least one intermediate network node 22 transmitting said report in a second communication network connected to the data source; and said data source adjusting transmission rate based on said received report (Column 8 Line 15-24), wherein only said data sink reports to said data source on said status of said first communications network (Column 8 Line 7-9), and none of said at least one intermediate network node report to said data source on said network status of said second communications network near said at least one intermediate network node (see Figure 2).

Regarding to claim 16, Chang teaches the network status information is information about the status of a network segment around the data sink, the network status information comprises a report about at least one of: congestion, radio-frequency interference, and weather condition in the network segment around the data sink, and the report is communicated to the data source (Column 8 Line 7-9).

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claim 3, 5, 12, 13 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. in view of Giroux et al. (US 6,963,538).

Regarding to claim 3, Chang teaches a network status reporting method for reporting in a communications network a network status information to a data source 21 with an adaptive transmission rate in order to enable said data source to adapt said transmission rate based on said network status information (Column 8 Line 15-24), said communications network further comprising at least one intermediate network node 22, and a data sink 23, wherein only said data sink reports to said data source on said network status information of said communications network in a neighbourhood around the data sink (Column 8 Line 7-9), and wherein no intermediate network node reports to said data source on said network status information of said communications network (see Figure 2).

Chang, however, does not teach said data sink is a line termination in an access network of said communications network. Giroux teaches said data sink 19 is a line termination in an access network of said communications network. It would have been obvious to one skilled in the art to modify Chang to use data sink as a line termination as taught by Giroux in order to monitor network status around the line termination (s2 in Figure 3A).

Regarding to claim 5, Giroux teaches said network status information is a capacity of a link 16 between a network termination 18 and a line termination 19 in said access network of said communications network (Column 5 Line 61-65).

Regarding to claim 12, Chang teaches a communications system comprising: a data source 21 with an adaptive transmission rate; a line termination element 11; a network termination element 23 connected to the line termination element via a first network; and at least one intermediate node 22 connecting the data source to the line termination element via a second network; wherein the data source adapts the transmission rate on the basis of a network status reported by at least one of the line termination element and the network termination element (Column 8 Line 15-24), and wherein the network status is determined based on a quality of signal of the first network only (see Figure 2). Chang, however, does not teach the line termination element and the network termination element negotiate a transmission rate for the first network, and wherein one of the line termination element and the network termination element reports the network status only when the transmission rate in the first network is changed. Giroux teaches the line termination element and the network termination element negotiate a transmission rate for the first network (Column 5 Line 60 – Column 6 Line 4), and wherein one of the line termination element and the network termination element reports the network



status only when the transmission rate in the first network is changed (Column 6 Line 20-37). It would have been obvious to one skilled in the art to modify Chang to have the line termination element and the network termination element negotiate a transmission rate for the first network as taught by Giroux in order to appropriately modify the send rate of traffic leaving source (Column 6 Line 10-11).

Regarding to claim 13, Giroux teaches the network termination element detects an influence of environmental conditions on the transmission rate of the first network (Column 5 Line 17-20) and, based on the detected influence, the network termination element and the line termination element re-negotiate the transmission rate (Column 5 Line 60 – Column 6 Line 4).

Regarding to claim 17, Giroux teaches the line termination element 19 is a data sink.

Regarding to claim 18, Chang teaches a network status reporting method comprising: a data sink 23 reporting to a data source 21 status information of a first communication network connected to the data sink; at least one intermediate network node 22 transmitting said report in a second communication network connected to the data source; and said data source adjusting transmission rate based on said received report (Column 8 Line 15-24), wherein only said data sink reports to said data source on said status of said first communications network

(Column 8 Line 7-9), and none of said at least one intermediate network node report to said data source on said network status of said second communications network near said at least one intermediate network node (see Figure 2). Chang, however, does not teach the data sink is connected to a modem via the first communication network and wherein said modem is connected to the data source via the at least one intermediate network node of the second communication network. Giroux teaches the data sink 12 is connected to a modem 19 via the first communication network 16 and wherein said modem is connected to the data source 11 via the at least one intermediate network node 24 of the second communication network 10. It would have been obvious to one skilled in the art to modify Chang to have the data sink is connected to a modem via the first communication network as taught by Giroux in order to monitor network status around the line termination (s2 in Figure 3A).

Regarding to claim 19, Giroux teaches the second communication network is internet and wherein the first communication network is public switch telephone network (Column 1 Line 31-35).

### ***Response to Arguments***

6. Applicant's arguments with respect to claim 1-21 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

7. Claim 14, 20 and 21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to the invention in general.

U.S. Patent 5,633,859 to Jain et al.

U.S. Patent 5,901,140 to Van As et al.

U.S. Patent 5,936,940 to Marin et al.

U.S. Patent 6,657,963 to Paquette et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Thursday 7 - 5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

C. H.

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Examiner  
Art Unit 2616

  
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